

# Work Order ID 86769

\*86769\*

Page 1

July-06-12 2:42:38 PM

Item ID: D3436-044 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Step RH  
 Start Date: 7/06/12 Start Qty: 4.00 \*4\* Cust Item ID:  
 Required Date: 8/03/12 Req'd Qty: 4.00 \*4\* Customer:  
 Reference:

Approvals: Process Plan:                      Date: 12-07-9 Tooling:                      Date:                      Run Start \*NR1\*  
 QC:                      Date:                      SPC (Y/N):                      Date:                      Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3436	Rev A								

100

0.00

\*100\*

Large Fab

Large Fab

Large Fab

## Memo

0.00

Weld bushings D3436-5 and clamp D3436-1 using welding Jig DT8772 and

Dwg D3436Dwg Rev: A

Qty Part Number Description Batch

A/RN/A 4130 Welding Rod M118875

Weld right step D3436-4 using welding Jig DT8773 and Dwg D3436Dwg

Rev: A

Qty Part Number Description Batch

A/RN/A 4130 Welding Rod M118875

Weld cap D3436-7 as per Dwg D3436Dwg Rev: A

Qty Part Number Description Batch

A/RN/A 4130 Welding Rod M118875

④

EL12-8-3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 <b>*110*</b> Bandsaw Jeaspa Bandsaw	BAND SAW  Memo 1-Slit part D3436-041 on bandsaw as per Dwg D3436 2- deburr	0.00  0.00				④		12-8-3	
120 <b>*120*</b> QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds  Memo	0.00  0.00				4		12-8-3	DAS 24 9-88
130 <b>*130*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00				4			SmB 12-8-03 12/06/12

# Dart Aerospace Ltd

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**\*86769\***

July-06-12 2:42:38 PM

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**\*4\***

**\*4\***

**Reference:**

Run Start \*NR1\*

Stop \*NR2\*

**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

140

White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel

0.00

**\*140\***

Powdercoat

## Powder Coating

## Memo

0.00

START TIME: 12h55  
OVEN TEMPERATURE: 400°F  
FINISH TIME: 1h25

m 121481

4 & 21 12/08/07.

145

Wing Walk as per dwg QSI005 4.4 Batch M12250 0.00

**\*145\***

HandFinish

## Hand Finishing

## Memo

0.00

Wing Walk B 11127500

4 RY 1 M 4/88/0 e.

150

### QC3- Inspect Part Finish

0.00

**\*150\***

QC

## Quality Control

## Memo

0.00

4K \_\_\_\_\_ *[Signature]* 12/08/09

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July-06-12 2:42:38 PM

**\*N900040100\***

Setup Start \*NS1\*

Stop **\*NS2\***

**Start Date:** 7/06/12      **Start Qty:** 4.00      **\*4\***

**Required Date:** 8/03/12      **Req'd Qty:** 4.00      **\*4\***

**Reference:**

Run Start \*NR1\*

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop **\*NR2\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

[illegible]

W/O:		WORK ORDER CHANGES					
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 Reference:

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 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
<b>*180*</b>									
QC	Memo	0.00							
Quality Control									

12/8/16 *[Signature]*  
 12-08-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

July-06-12 2:42:38 PM

Page 1

Work Order ID: 86769

Parent Item: D3436-044

Parent Item Name: Step RH

Start Date: 7/06/12

Required Date: 8/03/12

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP A 05.05.11New IssueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3436-5 Bushing		Manufactured	No			100	Each	48.0000	4	16		12-7-31	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST044		24							
				82071		24			16				
				WA		24							
				83316		24							
D3436-7 Cap		Manufactured	No			100	Each	29.0000	1	4		12-7-31	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA021		29							
				56836		29			4				
D3436-9 Pad		Manufactured	No			100	Each	18.0000	2	8		12/08/09	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		18							
				82172		6			62				
				83386		12							
D3436-4 Right Step		Manufactured	No			100	Each	0.0000	1	4		12-7-31	
				86707x4									
D3436-1 Clamp		Manufactured	No			155	Each	27.0000	1	4		12-7-31	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA024		27							
				17679		27			4				

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

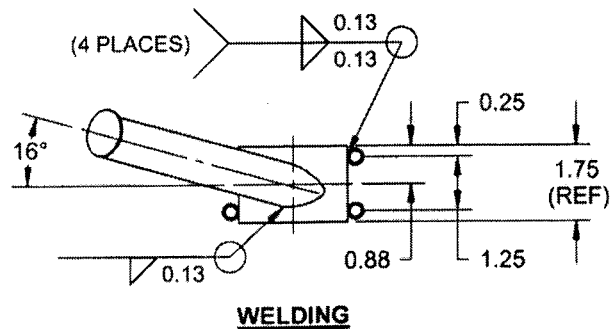
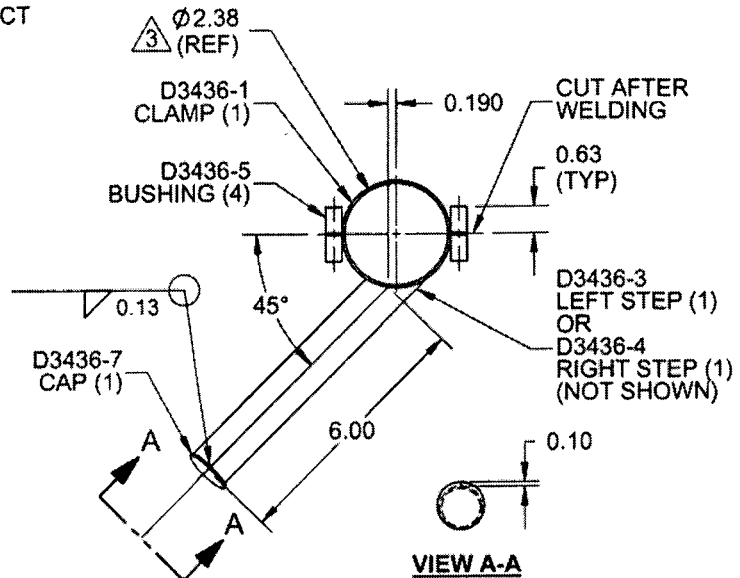
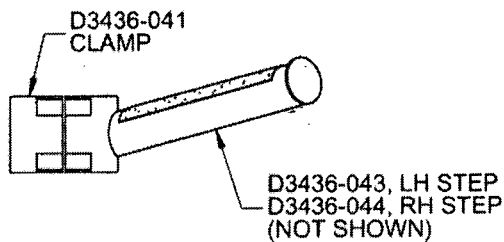
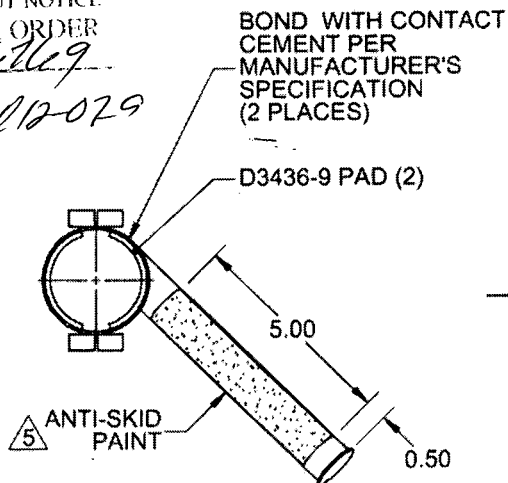
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**NOTE:** Date & initial all entries

**DART**SHOP COPY  
RETURN TOUNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO 86769  
12-079

DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <u>MB</u>	APPROVED <u>MB</u>	DRAWING NO. D3436	REV. A SHEET 1 OF 4
DATE 05.04.28	TITLE MAINTENANCE STEP		SCALE 1:4
A	05.04.28	NEW ISSUE	

**NOTES:**

- 1) POSITION PARTS AS PER JIGS DT8772 AND DT8773
- 2) WELD PER DART QSI 004
- 3) FILLET BOTH TOP AND BOTTOM EDGES OF CLAMP ALONG 2.38 I.D. SECTION TO 0.03 RADIUS TO PREVENT SCORING AND SCRATCHING OF SKID CROSS TUBE
- 4) FINISH: POWDER COAT WHITE GLOSS (4.3.5.2) PER DART QSI 005 4.3
- 5) APPLY BLACK ANTI-SKID PAINT AS SHOWN PER DART QSI 005 4.4
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES

**RELEASED**

05.05.27

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**Dart Aerospace Ltd**

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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

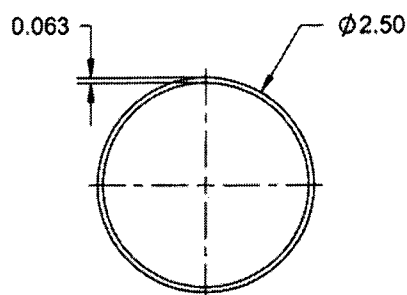
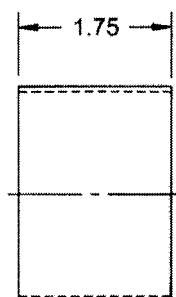
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



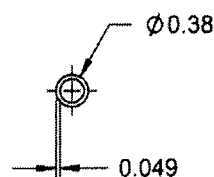
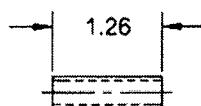
DESIGN MB	DRAWN BY MB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. <b>D3436</b>	REV. A SHEET 2 OF 4
DATE <b>05.04.28</b>		TITLE <b>MAINTENANCE STEP</b>	SCALE 1:2

86769



#### **D3436-1 CLAMP**

- 1) MATERIAL: AISI 4130N STEEL TUBING PER MIL-T-6736, AMS 6371, 6360, 6361, 6362, 6373 OR 6374 (REF. DART SPEC. M4130N-T2500W063)



#### **D3436-5 BUSHING**

- 2) MATERIAL: AISI 4130N STEEL TUBING PER MIL-T-6736, AMS 6371, 6360, 6361, 6362, 6373 OR 6374 (REF. DART SPEC. M4130N-T0375W049)

**RELEASED**

05-05-27 H

#### **D3436-1/ -5, GENERAL NOTES:**

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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# Dart Aerospace Ltd

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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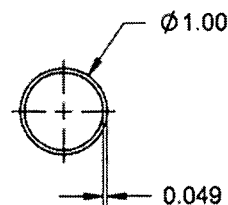
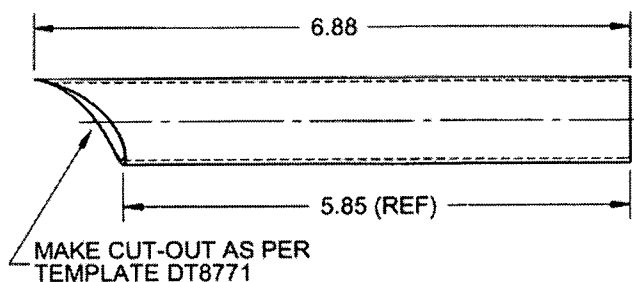
**NOTE:** Date & initial all entries



**DART**

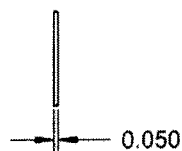
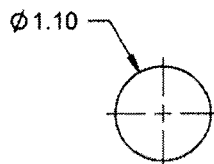
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CHECKED #	APPROVED #	DRAWING NO. <b>D3436</b>	REV. A SHEET 3 OF 4
DATE <b>05.04.28</b>		TITLE <b>MAINTENANCE STEP</b>	SCALE 1:2

86749

**D3436-3 LEFT STEP**

(D3436-4 RIGHT STEP - OPPOSITE, NOT SHOWN)

- 1) MATERIAL: AISI 4130N STEEL TUBING PER MIL-T-6736, AMS 6371, 6360, 6361, 6362, 6373 OR 6374 (REF. DART SPEC. M4130N-T1000W049)

**D3436-7 CAP**

- 2) MATERIAL: AISI 4130N STEEL SHEET PER MIL-S-18729, AMS6350 OR AMS 6351 (REF. DART SPEC. M4130N-S050)

**RELEASED**

05-05-27-#

**D3436-3/-7, GENERAL NOTES:**

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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**Dart Aerospace Ltd**

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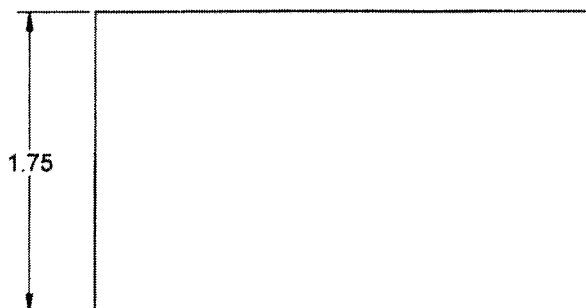
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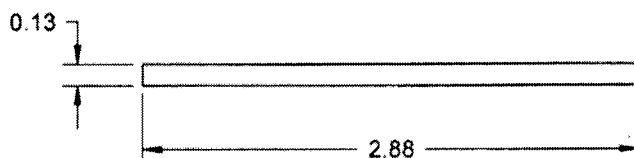
**NOTE:** Date & initial all entries



DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3436	REV. A SHEET 4 OF 4
DATE 05.04.28		TITLE MAINTENANCE STEP	SCALE 1:1



*86769*



RELEASED

05-05-27 *[Signature]*

**D3436-9 PAD**

**NOTES:**

- 1) MATERIAL: 60 DUROMETER NEOPRENE SHEET, 1/8" THICK  
(REF. DART SPEC. M-NEO60-S.125)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

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